

U.S. Application Serial No. 10/681,049
Office Action mailed November 23, 2005
Response to Office Action dated February 23, 2006

Docket No. HDAC-5002-U

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing Of Claims

1 (cancelled).

2 (presently amended). A compound according to claim + 101 wherein the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted straight chained C₁₋₆ alkyl, C₂₋₆ oxaalkyl or C₂₋₆ aminoalkyl.

3 (presently amended). A compound according to claim + 101 wherein the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted straight chained C₁₋₄ alkyl, C₂₋₄ oxaalkyl or C₂₋₄ aminoalkyl.

4 (presently amended). A compound according to claim + 101 wherein the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is 1, 2, 3, 4, 5, or 6, atoms in length.

5 (presently amended). A compound according to claim + 101 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ renders the alkyl, oxaalkyl or aminoalkyl a branched alkyl, oxaalkyl or aminoalkyl.

6 (presently amended). A compound according to claim + 101 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted five or six membered ring.

7 (presently amended). A compound according to claim + 101 wherein the

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substituent attached to the substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl or C_{2-12} aminoalkyl of R_1 is a substituted or unsubstituted aromatic ring.

8 (presently amended). A compound according to claim ~~4~~ 101 wherein the substituent attached to the substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl or C_{2-12} aminoalkyl of R_1 is a substituted or unsubstituted aromatic ring comprising one or more heteroatoms.

9 (presently amended). A compound according to claim ~~4~~ 101 wherein the substituent attached to the substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl or C_{2-12} aminoalkyl of R_1 is a substituted or unsubstituted aryl.

10 (presently amended). A compound according to claim ~~4~~ 101 wherein R_2 comprise a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less.

11 (withdrawn). A compound according to claim 1 wherein R_2 comprise a moiety selected from the group consisting of a C_{1-4} alkyl, C_{2-4} aminoalkyl or C_{2-4} oxaalkyl, $-C(O)H$, and $-C(O)-C_{1-3}$ alkyl.

12 (presently amended). A compound according to claim ~~4~~ 101 wherein ~~R_3 or R_4~~ comprise a moiety selected from the group consisting of a substituted or unsubstituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl or C_{2-12} oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, when the other of at least one of R_3 and R_4 is a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less.

13 (presently amended). A compound according to claim ~~4~~ 101 wherein ~~R_3 or R_4~~ comprises a moiety selected from the group consisting of a substituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl and C_{2-12} oxaalkyl where at least one of the substituents is selected from

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~~the group consisting of substituted and unsubstituted straight chained C₁₋₁₂ alkyls, C₂₋₁₂ oxaalkyls or C₂₋₁₂ aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings and the~~
other at least one of R₃ and R₄ comprises a member of the group consisting of C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, and -C(O)-C₁₋₃ alkyl.

14 (presently amended). A compound according to claim ~~+~~ 101 wherein R₃ comprises a substituted 6 membered ring that is substituted beta relative to R₅.

15 (presently amended). A compound according to claim ~~+~~ 101 wherein R₃ comprises a substituted aryl that is substituted meta relative to R₅.

16 (presently amended). A compound according to claim ~~+~~ 101 wherein R₃ comprises a substituted aryl that is substituted meta relative to R₅ with a substituent selected from the group consisting of a C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, -C(O)-C₁₋₃ alkyl.

17 (cancelled).

18 (presently amended). A compound according to claim ~~+~~ 101 wherein M comprises a member selected from the group consisting of trifluoroacetyl (-C(O)-CF₃), -NH-P(O)OH-CH₃, sulfonamides (-SO₂NH₂), thiols(-SH), and carbonyl groups having the formula -C(O)-R₇ wherein R₇ is hydroxylamino, hydroxyl, amino, alkylamino, or an alkyloxy group.

19 (presently amended). A compound according to claim ~~+~~ 101 wherein M comprises a hydroxamic acid moiety.

20 (cancelled).

21 (presently amended). A compound according to claim ~~20~~ 104 wherein R₃ or R₄ is selected from the group consisting of a substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl

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and C₂₋₁₂ oxaalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C₁₋₁₂ alkyls, C₂₋₁₂ oxaalkyls or C₂₋₁₂ aminoalkyls and substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered rings and the other is selected from the group consisting of C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, -C(O)-C₁₋₃ alkyl.

22 (presently amended). A compound according to claim 20 104 wherein R₁ comprises a moiety attached to the nitrogen selected from the group consisting of a substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl and C₂₋₁₂ aminoalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C₁₋₁₂ alkyls, C₂₋₁₂ oxaalkyls or C₂₋₁₂ aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings.

23 (withdrawn). A compound according to claim 22 wherein the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted straight chained C₁₋₆ alkyl, C₂₋₆ oxaalkyl or C₂₋₆ aminoalkyl.

24 (withdrawn). A compound according to claim 22 wherein the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted straight chained C₁₋₄ alkyl, C₂₋₄ oxaalkyl or C₂₋₄ aminoalkyl.

25 (withdrawn). A compound according to claim 22 wherein the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is 1, 2, 3, 4, 5, or 6, atoms in length.

26 (withdrawn). A compound according to claim 22 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ renders the alkyl, oxaalkyl or aminoalkyl a branched alkyl, oxaalkyl or aminoalkyl.

27 (withdrawn). A compound according to claim 22 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted five or six membered ring.

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28 (withdrawn). A compound according to claim 22 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aromatic ring.

29 (withdrawn). A compound according to claim 22 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aromatic ring comprising one or more heteroatoms.

30 (withdrawn). A compound according to claim 22 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aryl.

31 (original). A compound according to claim 22 wherein R₂ comprise a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less.

32 (withdrawn). A compound according to claim 22 wherein R₂ comprise a moiety selected from the group consisting of a C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, and -C(O)-C₁₋₃ alkyl.

33 (presently amended). A compound according to claim 20 104 wherein the other of R₃ and R₄ is a moiety that has a maximum chain length of non-hydrogen atoms of four or less.

34 (presently amended). A compound according to claim 20 104 wherein ~~R₃ or R₄ comprises a moiety selected from the group consisting of a substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl and C₂₋₁₂ oxaalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C₁₋₁₂ alkyls, C₂₋₁₂ oxaalkyls or C₂₋₁₂ aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings and the other at least one of R₃ and R₄~~ comprises a member of the group consisting of C₁₋₄ alkyl, C₂₋₄

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aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, and -C(O)-C₁₋₃ alkyl.

35 (presently amended). A compound according to claim ~~20~~ 104 wherein R₃ comprises a substituted 6 membered ring that is substituted beta relative to R₅.

36 (presently amended). A compound according to claim ~~20~~ 104 wherein R₃ comprises a substituted aryl that is substituted meta relative to R₅.

37 (presently amended). A compound according to claim ~~20~~ 104 wherein R₃ comprises a substituted aryl that is substituted meta relative to R₅ with a substituent selected from the group consisting of a C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, -C(O)-C₁₋₃ alkyl.

38 (cancelled).

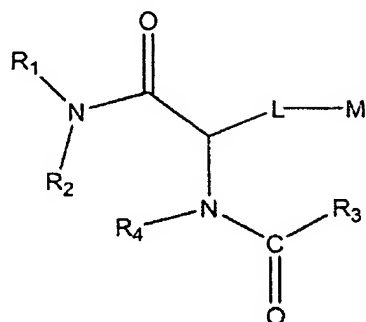
39 (presently amended). A compound according to claim ~~20~~ 104 wherein M comprises a member selected from the group consisting of trifluoroacetyl (-C(O)-CF₃), -NH-P(O)OH-CH₃, sulfonamides (-SO₂NH₂), thiols(-SH), and carbonyl groups having the formula -C(O)-R₇ wherein R₇ is hydroxylamino, hydroxyl, amino, alkylamino, or an alkyloxy group.

40 (presently amended). A compound according to claim ~~20~~ 104 wherein M comprises a hydroxamic acid moiety.

41 (original). A compound comprising the formula

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wherein

R_1 and R_2 each independently comprise a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl or C_{2-12} oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R_1 and R_2 are not both hydrogen;

R_3 and R_4 are each independently selected from the group consisting of a substituted or unsubstituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl or C_{2-12} oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

M is a substituent capable of complexing with a protein metal ion; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

42 (withdrawn). A compound according to claim 41 wherein the substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl or C_{2-12} aminoalkyl of R_1 is a substituted straight chained C_{1-6} alkyl, C_{2-6} oxaalkyl or C_{2-6} aminoalkyl.

43 (withdrawn). A compound according to claim 41 wherein the substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl or C_{2-12} aminoalkyl of R_1 is a substituted straight chained C_{1-4} alkyl, C_{2-4} oxaalkyl or C_{2-4} aminoalkyl.

44 (withdrawn). A compound according to claim 41 wherein the substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl or C_{2-12} aminoalkyl of R_1 is 1, 2, 3, 4, 5, or 6, atoms in length.

45 (withdrawn). A compound according to claim 41 wherein the substituent

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attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ renders the alkyl, oxaalkyl or aminoalkyl a branched alkyl, oxaalkyl or aminoalkyl.

46 (withdrawn). A compound according to claim 41 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted five or six membered ring.

47 (withdrawn). A compound according to claim 41 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aromatic ring.

48 (withdrawn). A compound according to claim 41 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aromatic ring comprising one or more heteroatoms.

49 (withdrawn). A compound according to claim 41 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aryl.

50 (withdrawn). A compound according to claim 41 wherein R₂ comprise a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less.

51 (withdrawn). A compound according to claim 41 wherein R₂ comprise a moiety selected from the group consisting of a C₁₋₄ alkyl, aminoalkyl or oxaalkyl, -C(O)H, and -C(O)-C₁₋₃ alkyl.

52 (presently amended). A compound according to claim 41 wherein ~~R₃ or R₄~~ comprise a moiety selected from the group consisting of a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4,

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~~5, 6, 7 or 8 membered ring, when the other of at least one of R₃ and R₄ is a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less.~~

53 (presently amended). A compound according to claim 41 wherein ~~R₃ or R₄~~ comprises ~~a moiety selected from the group consisting of a substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl and C₂₋₁₂ oxaalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C₁₋₁₂ alkyls, C₂₋₁₂ oxaalkyls or C₂₋₁₂ aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings and the other~~ at least one of R₃ and R₄ comprises a member of the group consisting of C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, and -C(O)-C₁₋₃ alkyl.

54 (original). A compound according to claim 41 wherein R₃ comprises a substituted 6 membered ring that is substituted beta relative to R₅.

55 (original). A compound according to claim 41 wherein R₃ comprises a substituted aryl that is substituted meta relative to R₅.

56 (original). A compound according to claim 41 wherein R₃ comprises a substituted aryl that is substituted meta relative to R₅ with a substituent selected from the group consisting of a C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, -C(O)-C₁₋₃ alkyl.

57 (original). A compound according to claim 41 wherein L comprises a cinnamate moiety.

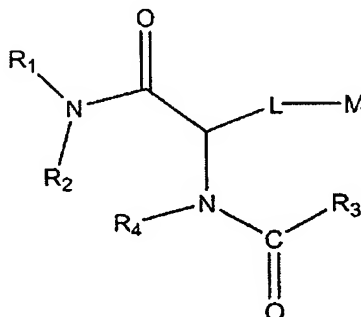
58 (original). A compound according to claim 41 wherein M comprises a member selected from the group consisting of trifluoroacetyl (-C(O)-CF₃), -NH-P(O)OH-CH₃, sulfonamides (-SO₂NH₂), thiols(-SH), and carbonyl groups having the formula -C(O)-R₇ wherein R₇ is hydroxylamino, hydroxyl, amino, alkylamino, or an alkyloxy group.

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59 (original). A compound according to claim 41 wherein M comprises a hydroxamic acid moiety.

60 (presently amended). A compound comprising the formula



wherein

R₁ comprises a moiety attached to the nitrogen selected from the group consisting of a substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl and C₂₋₁₂ aminoalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C₁₋₁₂ alkyls, C₂₋₁₂ oxaalkyls or C₂₋₁₂ aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings;

R₂ comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

R₃ and R₄ are each independently selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that ~~R₃ and R₄ are not both~~ is not hydrogen;

M is a substituent capable of complexing with a protein metal ion; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

61 (withdrawn). A compound according to claim 60 wherein the substituted straight

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chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted straight chained C₁₋₆ alkyl, C₂₋₆ oxaalkyl or C₂₋₆ aminoalkyl.

62 (withdrawn). A compound according to claim 60 wherein the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted straight chained C₁₋₄ alkyl, C₂₋₄ oxaalkyl or C₂₋₄ aminoalkyl.

63 (withdrawn). A compound according to claim 60 wherein the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is 1, 2, 3, 4, 5, or 6, atoms in length.

64 (withdrawn). A compound according to claim 60 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ renders the alkyl, oxaalkyl or aminoalkyl a branched alkyl, oxaalkyl or aminoalkyl.

65 (withdrawn). A compound according to claim 60 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted five or six membered ring.

66 (withdrawn). A compound according to claim 60 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aromatic ring.

67 (withdrawn). A compound according to claim 60 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aromatic ring comprising one or more heteroatoms.

68 (withdrawn). A compound according to claim 60 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aryl.

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69 (original). A compound according to claim 60 wherein R_2 comprise a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less.

70 (withdrawn). A compound according to claim 60 wherein R_2 comprise a moiety selected from the group consisting of a C_{1-4} alkyl, C_{2-4} aminoalkyl or C_{2-4} oxaalkyl, $-C(O)H$, and $-C(O)-C_{1-3}$ alkyl.

71 (presently amended). A compound according to claim 60 wherein R_3 or R_4 ~~comprise a moiety selected from the group consisting of a substituted or unsubstituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl or C_{2-12} oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, when the other of at least one of R_3 and R_4 is a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less.~~

72 (presently amended). A compound according to claim 60 wherein R_3 or R_4 ~~comprises a moiety selected from the group consisting of a substituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl and C_{2-12} oxaalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C_{1-12} alkyls, C_{2-12} oxaalkyls or C_{2-12} aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings and the other at least one of R_3 and R_4 comprises a member of the group consisting of C_{1-4} alkyl, C_{2-4} aminoalkyl or C_{2-4} oxaalkyl, $-C(O)H$, and $-C(O)-C_{1-3}$ alkyl.~~

73 (original). A compound according to claim 60 wherein R_3 comprises a substituted 6 membered ring that is substituted beta relative to R_5 .

74 (original). A compound according to claim 60 wherein R_3 comprises a substituted aryl that is substituted meta relative to R_5 .

75 (original). A compound according to claim 60 wherein R_3 comprises a substituted

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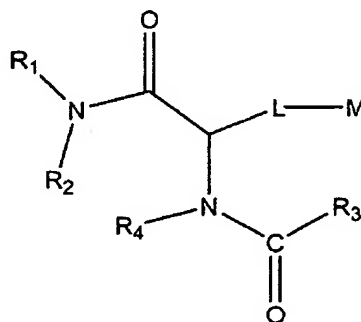
aryl that is substituted meta relative to R₅ with a substituent selected from the group consisting of a C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, -C(O)-C₁₋₃ alkyl.

76 (original). A compound according to claim 60 wherein L comprises a cinnamate moiety.

77 (original). A compound according to claim 60 wherein M comprises a member selected from the group consisting of trifluoroacetyl (-C(O)-CF₃), -NH-P(O)OH-CH₃, sulfonamides (-SO₂NH₂), thiols(-SH), and carbonyl groups having the formula -C(O)-R₇ wherein R₇ is hydroxylamino, hydroxyl, amino, alkylamino, or an alkyloxy group.

78 (original). A compound according to claim 60 wherein M comprises a hydroxamic acid moiety.

79 (presently amended). A compound comprising the formula



wherein

R₁ and R₂ each independently comprise a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R₁ and R₂ are not both hydrogen;

one of R₃ and R₄ is selected from the group consisting of a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, when the other of R₃ and R₄ is a moiety selected from the group

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consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less, with the proviso that R_4 is not hydrogen;

M is a substituent capable of complexing with a protein metal ion; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

80 (presently amended). A compound according to claim 79 wherein ~~R_3 or R_4~~ comprises a moiety selected from the group consisting of a substituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl and C_{2-12} oxaalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C_{1-12} alkyls, C_{2-12} oxaalkyls or C_{2-12} aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings and the other at least one of R_3 and R_4 comprises a member of the group consisting of C_{1-4} alkyl, C_{2-4} aminoalkyl or C_{2-4} oxaalkyl, $-C(O)H$, and $-C(O)-C_{1-3}$ alkyl.

81 (original). A compound according to claim 79 wherein R_1 comprises a moiety attached to the nitrogen selected from the group consisting of a substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl and C_{2-12} aminoalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C_{1-12} alkyls, C_{2-12} oxaalkyls or C_{2-12} aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings.

82 (withdrawn). A compound according to claim 79 wherein the substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl or C_{2-12} aminoalkyl of R_1 is a substituted straight chained C_{1-6} alkyl, C_{2-6} oxaalkyl or C_{2-6} aminoalkyl.

83 (withdrawn). A compound according to claim 79 wherein the substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl or C_{2-12} aminoalkyl of R_1 is a substituted straight chained C_{1-4} alkyl, C_{2-4} oxaalkyl or C_{2-4} aminoalkyl.

84 (withdrawn). A compound according to claim 79 wherein the substituted straight chained C_{1-12} alkyl, C_{2-12} oxaalkyl or C_{2-12} aminoalkyl of R_1 is 1, 2, 3, 4, 5, or 6, atoms in length.

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85 (withdrawn). A compound according to claim 79 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ renders the alkyl, oxaalkyl or aminoalkyl a branched alkyl, oxaalkyl or aminoalkyl.

86 (withdrawn). A compound according to claim 79 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted five or six membered ring.

87 (withdrawn). A compound according to claim 79 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aromatic ring.

88 (withdrawn). A compound according to claim 79 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aromatic ring comprising one or more heteroatoms.

89 (withdrawn). A compound according to claim 79 wherein the substituent attached to the substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl or C₂₋₁₂ aminoalkyl of R₁ is a substituted or unsubstituted aryl.

90 (original). A compound according to claim 79 wherein R₂ comprise a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less.

91 (withdrawn). A compound according to claim 79 wherein R₂ comprise a moiety selected from the group consisting of a C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, and -C(O)-C₁₋₃ alkyl.

92 (original). A compound according to claim 79 wherein the other of R₃ and R₄ is a

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moiety that has a maximum chain length of non-hydrogen atoms of four or less.

93 (presently amended). A compound according to claim 79 wherein ~~R₃ or R₄~~ comprises a moiety selected from the group consisting of a substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl and C₂₋₁₂ oxaalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C₁₋₁₂ alkyls, C₂₋₁₂ oxaalkyls or C₂₋₁₂ aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings and the ~~ether~~ at least one of R₃ and R₄ comprises a member of the group consisting of C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, and -C(O)-C₁₋₃ alkyl.

94 (original). A compound according to claim 79 wherein R₃ comprises a substituted 6 membered ring that is substituted beta relative to R₅.

95 (original). A compound according to claim 79 wherein R₃ comprises a substituted aryl that is substituted meta relative to R₅.

96 (original). A compound according to claim 79 wherein R₃ comprises a substituted aryl that is substituted meta relative to R₅ with a substituent selected from the group consisting of a C₁₋₄ alkyl, C₂₋₄ aminoalkyl or C₂₋₄ oxaalkyl, -C(O)H, -C(O)-C₁₋₃ alkyl.

97 (original). A compound according to claim 79 wherein L comprises a cinnamate moiety.

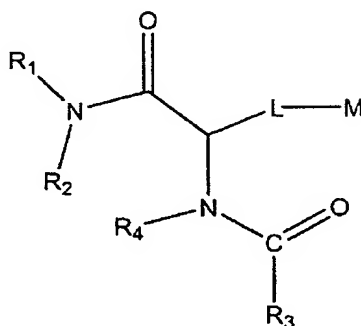
98 (original). A compound according to claim 79 wherein M comprises a member selected from the group consisting of trifluoroacetyl (-C(O)-CF₃), -NH-P(O)OH-CH₃, sulfonamides (-SO₂NH₂), thiols(-SH), and carbonyl groups having the formula -C(O)-R₇ wherein R₇ is hydroxylamino, hydroxyl, amino, alkylamino, or an alkyloxy group.

99 (original). A compound according to claim 79 wherein M comprises a hydroxamic acid moiety.

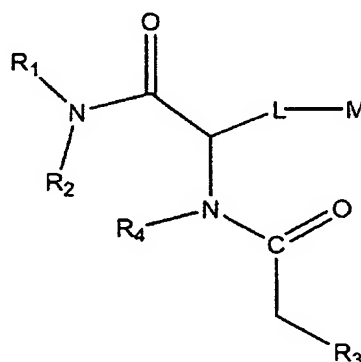
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100 (presently amended). A compound comprising the formula



or



wherein

R_1 and R_2 each independently comprise a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl or C_{2-12} oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R_1 and R_2 are not both hydrogen;

R_3 comprises a substituted six membered ring attached to the carbonyl carbon or methylene wherein at least one of the substituents of the six membered ring is beta relative to atom attached to the carbonyl carbon or methylene;

R_4 comprises a moiety selected from the group consisting of hydrogen, a substituted or

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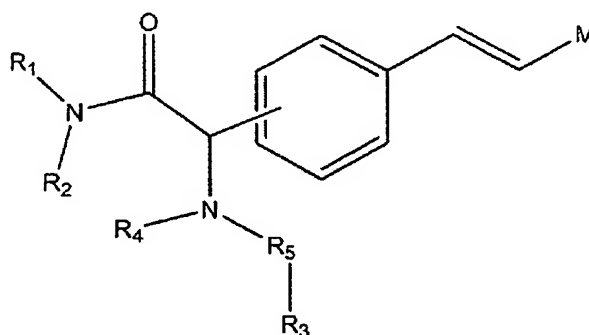
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unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

M is a substituent capable of complexing with a protein metal ion; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

101 (original). A compound comprising the formula:



wherein

R₁ comprises a moiety attached to the nitrogen selected from the group consisting of a substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl and C₂₋₁₂ aminoalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C₁₋₁₂ alkyls, C₂₋₁₂ oxaalkyls or C₂₋₁₂ aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings;

R₂ comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

R₃ and R₄ are each independently selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R₃ and R₄ are not both hydrogen;

R₅ is selected from the group consisting of a carbonyl, a substituted or unsubstituted C₁₋₃

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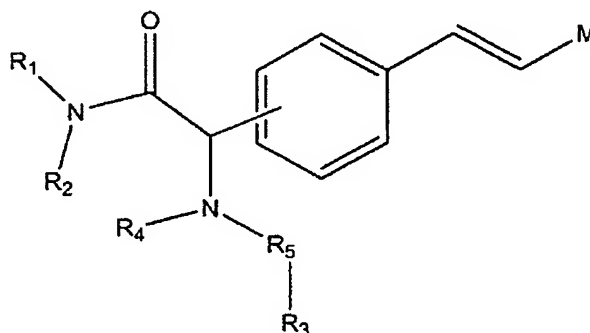
alkyl, a substituted or unsubstituted $-C_{1-3}$ alkyl- $C(O)$, a substituted or unsubstituted $-C(O)-C_{1-3}$ alkyl, and a substituted or unsubstituted $-C(O)C(O)C_{1-3}$ alkyl; and

M is a substituent capable of complexing with a protein metal ion.

102 (original). A compound according to claim 101 wherein the phenyl ring is meta substituted.

103 (withdrawn). A compound according to claim 101 wherein the phenyl ring is para substituted.

104 (original). A compound comprising the formula:



wherein

R_1 and R_2 each independently comprise a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl or C_{2-12} oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R_1 and R_2 are not both hydrogen;

one of R_3 and R_4 is selected from the group consisting of a substituted or unsubstituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl or C_{2-12} oxaalkyl, and a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, when the other of R_3 and R_4 is a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of

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six or less;

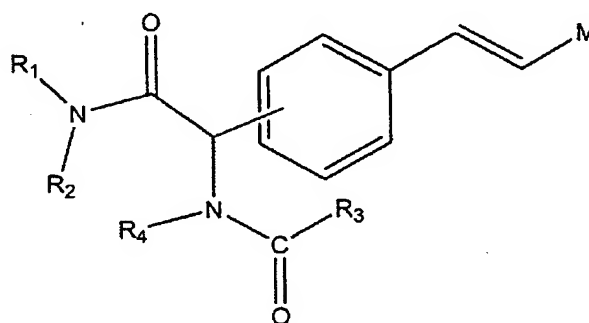
R_5 is selected from the group consisting of a carbonyl, a substituted or unsubstituted C_{1-3} alkyl, a substituted or unsubstituted $-C_{1-3}$ alkyl-C(O), a substituted or unsubstituted $-C(O)-C_{1-3}$ alkyl, and a substituted or unsubstituted $-C(O)C(O)C_{1-3}$ alkyl; and

M is a substituent capable of complexing with a protein metal ion.

105 (original). A compound according to claim 104 wherein the phenyl ring is meta substituted.

106 (withdrawn). A compound according to claim 104 wherein the phenyl ring is para substituted.

107 (original). A compound comprising the formula



wherein

R_1 and R_2 each independently comprise a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl or C_{2-12} oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R_1 and R_2 are not both hydrogen;

R_3 and R_4 are each independently selected from the group consisting of a substituted or unsubstituted straight chained C_{1-12} alkyl, C_{2-12} aminoalkyl or C_{2-12} oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring; and

M is a substituent capable of complexing with a protein metal ion.

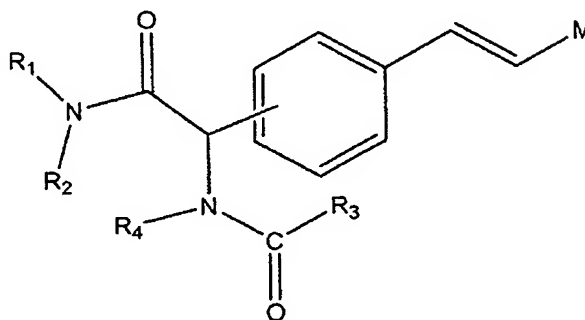
108 (original). A compound according to claim 107 wherein the phenyl ring is meta substituted.

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109 (withdrawn). A compound according to claim 107 wherein the phenyl ring is para substituted.

110 (original). A compound comprising the formula



wherein

R₁ comprises a moiety attached to the nitrogen selected from the group consisting of a substituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ oxaalkyl and C₂₋₁₂ aminoalkyl where at least one of the substituents is selected from the group consisting of substituted and unsubstituted straight chained C₁₋₁₂ alkyls, C₂₋₁₂ oxaalkyls or C₂₋₁₂ aminoalkyls and substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered rings;

R₂ comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

R₃ and R₄ are each independently selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R₃ and R₄ are not both hydrogen; and

M is a substituent capable of complexing with a protein metal ion.

111 (original). A compound according to claim 110 wherein the phenyl ring is meta substituted.

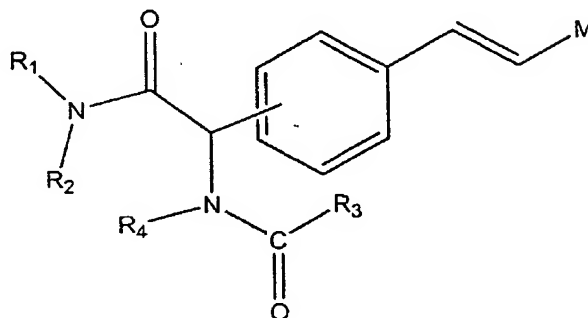
112 (withdrawn). A compound according to claim 110 wherein the phenyl ring is

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para substituted.

113 (original). A compound comprising the formula



wherein

R₁ and R₂ each independently comprise a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R₁ and R₂ are not both hydrogen;

one of R₃ and R₄ is selected from the group consisting of a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, when the other of R₃ and R₄ is a moiety selected from the group consisting of hydrogen and a moiety that has a maximum chain length of non-hydrogen atoms of six or less;

M is a substituent capable of complexing with a protein metal ion.

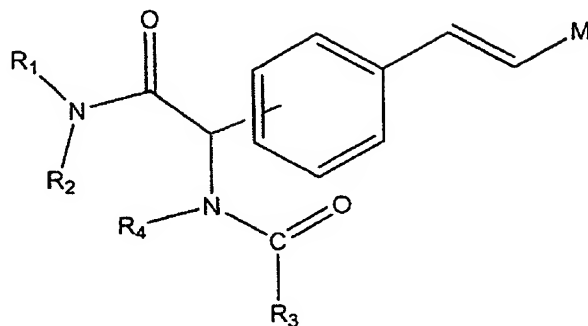
114 (original). A compound according to claim 113 wherein the phenyl ring is meta substituted.

115 (withdrawn). A compound according to claim 113 wherein the phenyl ring is para substituted.

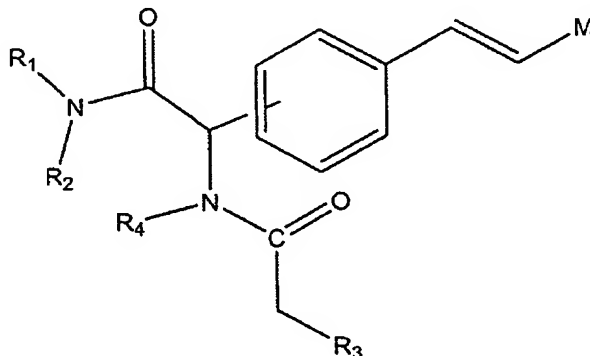
116 (original). A compound comprising the formula

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or



wherein

R₁ and R₂ each independently comprise a moiety attached to the nitrogen selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R₁ and R₂ are not both hydrogen;

R₃ comprises a substituted six membered ring attached to the carbonyl carbon or methylene wherein at least one of the substituents of the six membered ring is beta relative to atom attached to the carbonyl carbon or methylene;

R₄ comprises a moiety selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C₁₋₁₂ alkyl, C₂₋₁₂ aminoalkyl or C₂₋₁₂ oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

M is a substituent capable of complexing with a protein metal ion.

117 (original).
meta substituted.

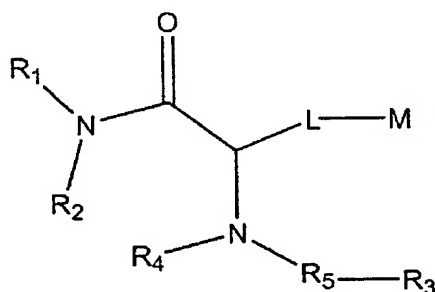
A compound according to claim 116 wherein the phenyl ring is

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118 (withdrawn). A compound according to claim 116 wherein the phenyl ring is para substituted.

119 (previously presented). A compound comprising the formula:



wherein

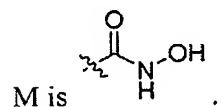
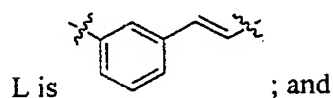
R₁ is a substituted straight chained C₁₋₁₂ alkyl where at least one of the substituents is a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

R₂ is H;

R₃ is a substituted or unsubstituted aryl group;

R₄ is a substituted or unsubstituted straight chain C₁₋₁₂ alkyl;

R₅ is a carbonyl group;



120 (new). A compound according to claim 101 wherein R₄ is not hydrogen.

121 (new). A compound according to claim 104 wherein R₄ is not hydrogen.

122 (new). A compound according to claim 110 wherein R₄ is not hydrogen.

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123 (new). A compound according to claim 113 wherein R₄ is not hydrogen.

124 (new). A compound according to claim 116 wherein R₄ is not hydrogen.